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DREDGING OPERATIONS TECHNICAL SUPPORT PROGRAM

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REVISED PROCEDURAL GUIDE FOR DESIGNATION SURVEYS OF OCEAN DREDGED MATERIAL DISPOSAL SITES

by

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19. ABSTRACT (Continue on reverse if necessary and identify by block number) <p>This procedural guide is a revision of that issued in 1981 and has been prepared to meet the needs of the Corps of Engineers in conducting surveys for the designation of ocean disposal sites for dredged material. Basic purposes of the guide are to provide detailed information on evaluation of oceanographic parameters, collection of field samples, and performance of laboratory analyses. Another objective is to clarify the role of the monitoring program that may be instituted at each site pursuant to final site designation and to relate its content to the original site survey.</p> <p>Because the scientific content of the surveys is, in part, related to physical characteristics of the sites, such as size, depth of water, and distance from shore, these characteristics as they pertain to sites in the various Corps Districts are discussed in detail. There is also a discussion of the common features of the oceanography of the US continental shelf because over 80 percent of existing sites are located on the shelf. A substantial portion of the guide is devoted to the selection of variables to be measured in the field and the rationale for placement of sampling stations, as well as gear appropriate to various conditions.</p> <p style="text-align: right;">(Continued)</p>						
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Detailed guidance is given on the preferred methods of sample analysis, including biological, physical, chemical, and geological methodologies. Suggestions are given for effective presentation of the field and laboratory data generated during the site survey. Because site designation does not, in itself, include the disposal of dredged material, the methodologies are, so far as possible, compatible with those used for the evaluation of material proposed for disposal. Although site designation, evaluation of material for disposal, and monitoring are separate activities, they are part of a continuum and should share common techniques so as to be cost-effective and of maximum technical validity.

Following an extensive listing of pertinent references, six technical appendixes are presented. These include a basic discussion of the nature of dredged material, factors reducing potential adverse effects of toxic substances in dredged material, and various specific analytical techniques. There is also a guide for at-sea operations, a basis for estimating survey costs, and a brief list of equipment suppliers.

The guide has been prepared in loose-leaf format so that revisions and changes as a result of regulatory modifications, development of new techniques, and changes in site status can be easily incorporated.